

COMMENTS ON OPILIONES DESCRIBED FROM WESTERN NORTH AMERICA BY SCHENKEL¹

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ABSTRACT: Examination of the type specimens of harvestmen described by Schenkel from western North America reveals several new synonymies and a new combination. *Microgyas banksi* is considered a junior synonym of *Leuronychus pacificus* (Banks), while *Leuronychus gertschi* and *Nelima goodnighti* are regarded as synonyms of *Leiobunum? exilipes* (Wood). *Liomitopus leavis* is conspecific with *Leptobunus californicus* Banks, while *Eurybunus simplex* is transferred to the genus *Globipes*. The relationships of *Liopilio glaber*, *Globipes rugosus*, and *Protolophus longipes* are briefly discussed.

In 1951, E. Schenkel published the second part of the paper on the arachnids collected by H. Schenkel-Rudin in western North America. At the end of this second part ten species of harvestmen are treated; only two of which, *Ortholasma rugosa* Banks and *Phalangium opilio* Linne were not described as new. In addition, three monotypic genera were described. Forcart (1961) designated lectotypes from the type series described by Schenkel. During revisionary studies of several opilionid genera of western North America I noted some synonyms; a few initially based on a series of illustrations prepared of some of the types by Dr. William A. Shear. By examining the type specimens, deposited in Naturhistorisches Museum Basel (NMB), I was able to confirm the suspected synonymies. Due to the growing interest in North American Opiliones and the need of the synonymies in other studies, I have chosen to present my comments, the four new synonymies, and one new combination prior to the publication of revisions. The distribution stated for each species is based on museum specimens examined by me during revisionary studies.

Microgyas banksi Schenkel (1951:47-49, fig. 46). The male holotype (NMB no. 82-a; Forcart, 1961:53) from La Jolla, California, is a *Leuronychus pacificus* (Banks). As *Microgyas* is monotypic, it must be considered a junior synonym of *Leuronychus* Banks. This species differs from all known *Leuronychus* spp. by having the coxae, genital operculum, and ventral surface of the abdomen covered with rounded tubercles. *Leuronychus pacificus* is common along the coast from Baja California Norte to the northern boundary of British Columbia.

Liomitopus leavis Schenkel (1951:49-51, fig. 47). The male lectotype and female paralectotype (NMB no. 81-a; Forcart, 1961:53) from Yo-

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semita, California, are *Leptobunus californicus* Banks. As *Liomitopus* is monotypic, it is a junior synonym of *Leptobunus* Banks. *Leptobunus californicus* differs from all known *Leptobunus* spp. by having the distal tip of the penis many times longer than the paired primary setae of the glans, seminal receptacles with convoluted loop posteriorly, and by having no brown markings on the palpal tibiae. *Leptobunus californicus* is primarily found in the eastern portion of California and adjoining Nevada.

Liopilio glaber Schenkel (1951:51-53, fig. 48). The female lectotype and immature paralectotype (NMB no. 91-a; Forcart, 1961:53) from Canmore, Banff National Park, Alberta, are the only described specimens of this genus. A second species (undescribed) of the genus occurs in Alaska and southwestern Yukon Territory. The genus *Liopilio* is very similar to *Leptobunus*, but differs by having the patellae and tibiae of the palps swollen and densely covered with fine setae. The mal palpal tarsus of *Liopilio* has a ventral row of denticles. It is bare in *Leptobunus*. The paired setae of the penis glans are near the stylus-glans junction in *Liopilio*. In *Leptobunus* the setae are on the median portion of the glans. *Liopilio glaber* is now known from a few localities in the Rocky Mountains along the boundary of Alberta and British Columbia.

Eurybunus simplex Schenkel (1951:53-55). The female holotype (NMB no. 89-a; Forcart, 1961:52) from Berkeley Hills, California, is a member of the genus *Globipes* Banks. *Globipes simplex* is very similar to the southern California *Globipes spinulatus* Banks. *Globipes simplex* differs from *G. spinulatus* by being uniformly colored and over-all less spiny (tibiae II with no dorsal spines or tubercles). *Globipes simplex* is known only from a few localities in central California.

Globipes rugosus Schenkel (1951:55-57, fig. 49). The male lectotype and male (reported as a juvenile) paralectotype (NMB no. 90-a; Forcart, 1961:53) from La Jolla, California, are closely related to the Texas *Globipes formosus* (Banks) and an undescribed species from Chihuahua and Durango. All three differ from typical *Globipes* spp. by having one or no pseudosegments on tibiae II, angular leg tibiae (less so in I and III) cross section, and by having the tubercles on the legs arranged in distinct rows. Unlike other *Globipes* spp., *G. rugosus* have the chelicera covered with many pointed tubercles. In addition, the median dorsal tubercles of the abdomen are large and closely spaced in *G. rugosus*. *Globipes rugosus* is known only from three males collected in the San Diego area in California.

Protolophus longipes Schenkel (1951:57-59, fig. 50). The male lectotype, three male and two female paralectotypes (NMB no. 96-a and 96-b; Forcart, 1961:54) are similar to *Protolophus niger* Goodnight and Goodnight and *Protolophus tuberculatus* Banks. *Protolophus longipes* differs by the slender nature of the appendages, palpal patellae of both sexes

extended on inner margin, and the over-all small body size. Specifically, *P. longipes* differs from *P. niger* by having five paired abdominal tubercles; and from *P. tuberculatus* by having tibiae II longer than the body in males. *Protolophus longipes* is known from a few specimens taken near the type locality, forest near Guerneville and Monterio, California.

Leuronychus gertschi Schenkel (1951:59-61, fig. 51). The male lectotype and immature paralectotype (NMB no. 95-a; Forcart, 1961:53) from Russian Rivers near Guerneville, California, are *Leiobunum* ? *exilipes* (Wood). *Leiobunum* ? *exilipes* differs from all other western species referred to *Leiobunum* by having the tarsus of the palps light while the other segments are black, and legs are uniform brown to black without white bands. *Leiobunum* ? *exilipes* is known from scattered localities in California, Nevada, Montana, Oregon, and British Columbia.

Nelima goodnighti Schenkel (1951:61-62). The immature holotype (NMB no. 98-a; Forcart, 1961:53) from forest near Guerneville and Monterio, California, is essentially identical to the paralectotype of *Leuronychus gertschi*, which was collected only a few kilometers away. Like *L. gertschi*, this species is a junior synonym of *Leiobunum* ? *exilipes*.

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